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SALT, 1932

Salt production in Canada during 1932 amounted to 263,543 short tons valued at $1,947,551 as compared with 259,047 tons worth $1,904,149 in 1931, according to finally revised statistics issued by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics at Ottawa. This represents an increase of 1.7 per cent in quantity and 2.3 per cent in value and not only emphasizes the sound basis upon which this Canadian industry is established but reflects great credit to the salt producers of the Dominion who were able to record progress throughout such a period of adverse industrial conditions.

During 1932 salt was produced in Nova Scotia, Ontario and Manitoba. In Nova Scotia the Malagash Salt Company mined and crushed mineral salt and produced various grades of salt products. At Amherstburg, Ontario, the Brunner Mond Canada, Limited, produced saturated lime solutions for chemical purposes. Several grades of salt were manufactured at Sarnia, Ontario, by the Dominion Salt Company; vacuum pans and grainers were employed by this company. Vacuum and open pan processes were utilized by the Goderich Salt Company in the production of various grades of salt at Goderich, Ontario. Canadian Industries Limited, operating at Sandwich, Ontario, employed triple effect vacuum pans for the manufacture of fine salt and grainers for the production of coarse grades; the electrolytic process was utilized by the company in making caustic soda and other chemicals from brine. Exhaust steam was used at Goderich, Ontario, by Western Canada Flour Mills Company in the manufacture of the different salt products marketed by this company. The first official statistics of systematic salt production on a regular commercial scale in Manitoba were recorded in 1932 when the Neepawa Salt Company reported production for the first time; at Simpson in Saskatchewan the Simpson Oil Company were reported to be preparing to produce salt in 1933.

The Canadian salt companies now produce an extensive variety of high grade products; various table salts, including free running and iodized are of equal quality with the better brands produced throughout the world, other grades are manufactured and marketed for dairy, crop, highway, chemical, fishery, and other purposes. It is interesting to note that smoked salt is now produced in Canada. Exports of Canadian salt in 1932 totalled 11,253,900 pounds as against 12,251,700 pounds in 1931, the greater part of this going to the United States, New Zealand and Newfoundland.

Mr. A. R. Chambers of the Malagash Salt Company, New Glasgow, states in the "Canadian Engineer" that salt and its effects on gravel and earth roads has been under almost daily observation by the engineers of the Malagash Salt Company during summer seasons since the year 1926. Interesting experiments were conducted in the use of salt-clay surfaces. The salt-clay surface remains dustless if the surface is maintained and does not appear to depend upon gathering moisture from the air to do so. In view of the cheapness of this type of highway, it is hoped that the resetting properties of the salt and clay which permit easy patching and complete reworking of the surface as desired, will overcome some of the objections to hard surfaced highways other than those of the permanent or semi permanent type.

Experiments conducted at the Sandwich, Ontario, plant of Canadian Industries Limited by engineering experts indicate that salt mixed with sand will maintain sand piles (especially along highways) in the desired condition through all ordinary conditions of frost. Salt gives satisfactory protection against freezing and anchors the sand when applied to the road.

The United States Bureau of Mines reports that evaporated salt, which represented 32 per cent of the total sales in 1932, amounted to 2,061,215 short tons valued at $13,166,795, a decrease of 6 per cent in quantity and 7 per cent in value from 2,203,690 tons valued at $14,177,116 in 1931. Rock salt, which represents 25 per cent of the salt produced in 1932 amounted to 1,616,315 short tons valued at $4,928,622, a decrease of 13 per cent in quantity and 14 per cent in value from the output of 1,854,170 tons valued at $5,735,207 reported in 1931. The salt content of brine produced by chemical companies and used by them amounted to 2,769,821 short tons in 1932; this was 43 per cent of the total United States salt production and represents a decrease of 16 per cent in quantity from the output of 3,300,210 tons in 1931. Michigan, New York, Ohio, Kansas, Louisiana and California, in order named, are the largest producers of salt in the United States. In 1932 the bromine recovered in the United States by the producers from natural brine and the bromine content of bitterns used by producers in the manufacture of bromine compounds was 5,727,561 pounds valued at $1,182,569. Michigan, California, West Virginia and Ohio were the states producing bromine.

According to the preliminary report of the Fourth Census of Production, United Kingdom, 1930, the figures show a reduction of between 20 and 21 per cent in the total quantity of solid salt produced in 1930 as compared with 1924. The average selling value of salt of all kinds, including table salt, produced in 1930 as shown by the census returns was 1 pound 10 shillings per ton as compared with 1 pound 17 shillings per ton in 1924. The average value of brine transferred to chemical works was about one shilling per ton of salt content in 1930 and about 1 shilling 2d. per ton of salt content in 1924. The number of workpeople employed in the industry in 1930 (figures for the week ending December 13, 1930) was 3,307 (5,010 in 1924).

The Chemical Trade Journal and Chemical Engineer, London, report that an experimental factory for the production of ammonia soda, utilizing sea-water as the source of the sodium chloride, has been erected in Norway by the Norsk Hydro Elektrisk Kvaelstof, A.B. If the plant proves satisfactory the company will build a large plant at Heroya capable of producing 18,000 tons per annum of soda ash. Probably the whole of the initial output of this plant will be used by the Norsk Hydro itself in the production of synthetic sodium nitrate and to replace imported soda ash. A new state factory is to be erected by the Czechslovakian government in Napiesku, near Podbrezova. This is to supplement the output of the existing salt factory in Presov, which has hitherto supplied the bulk of the needs of the country in table salt. At the annual general meeting of the Magadi Soda Company, in London, it was announced that the production of soda ash over the three years - 1930, 1931 and 1932 - had continued at a fairly constant level and that it had thus been possible to fulfil the company's modified obligations to the Kenya government in respect of 1932. As regards soda exports the position remained very unpromising. National production in Japan presaged the disappearance of that market in a comparatively short time. The company was attempting to develop local markets more intensively, primarily by the production of salt in Kenya colony as the directors believed the recovery of salt from the lake liquors had been demonstrated to be economically feasible; the local market for salt amounted potentially to 10,000 tons per annum.

According to "Die Chemische Industrie" the Russian chemical industry was to have produced, according to the Five Year Plan programme, 345,000 tons of soda ash

(calculated in terms of soda ash). Actual production turned out at just over 320,000 tons while the demand from the home market during the year would, were it completely satisfied, have necessitated the production of not less than 900,000 tons of soda ash. Future Russian plans envisage the production in 1933 of 400,000 tons of soda and by 1937 of 2,500,000 tons.

It is interesting to note that the Soviet Union has utilized the first thousand tons of Soviet potassium for agricultural purposes. This was procured in the process of sinking the shaft of the first potash salt mine at Solikamsk. It is reported that this mine, planned for an output of 1,500,000 tons a year, will soon be ready for exploitation.

The report of the Department of Salt and Mineralogy of Ceylon for 1932 contains the following information:- In the districts round any salt producing centre retail dealers are required to take out a license to sell salt, the object of the registration being to prevent the sale of illicitly collected salt. There is no charge for the license. Natural salt forms in dry weather in many lagoons where sea water is cut off. If the formation is large enough and easily handled it is sometimes collected and sold, otherwise it is destroyed to prevent illicit collection. The import duty on salt remains at Rs. 4 per cent. Small quantities of refined table salt and rock salt for cattle are imported. The imports of refined salt for 1932 were valued at Rs. 9944. The possibility of exporting Ceylon salt to India was re-considered during the year. The report showed that the Tondaimannar salt was superior to some qualities imported at Calcutta and would probably command a higher price. There is, however, an additional duty amounting to 39 cents per cwt. on foreign salt and with this penalty it would be impossible to compete with salt from Tuticorin in the Calcutta market. It is probable that the degree of protection of Indian salt will be increased rather than reduced in the future. Other countries in the East impose still higher protective duties.

Production of Salt in Canada, by Grades, 1932.

	Manufactured tons	Sold tons	Value of salt sold (not including containers) $
Table, dairy and pressed blocks	61,168	60,128	1,194,649
Common, fine	58,472	59,036	349,571
Common, coarse	44,757	47,499	304,482
Land salt	583	583	2,349
Other grades	55	55	258
Brine for chemical works (salt equivalent sold or used)	96,242	96,242	96,242
TOTAL	261,277	263,543	1,947,551
Value of containers	...	...	560,413
GRAND TOTAL	261,277	263,543	2,507,964

Imports into Canada and Exports of Salt, 1932.

	Tons	Value $
IMPORTS -		
Salt, for use of the sea or gulf fisheries	27,798	100,939
Salt, in bulk, n.o.p.	39,065	177,623
Salt, n.o.p., in bags, barrels, etc.	34,990	307,195
Salt, table, made by an admixture of other ingredients, when containing not less than 90 per cent of pure salt	180	10,197
TOTAL	102,033	595,954
EXPORTS ..... TOTAL	5,627	36,248

Principal Statistics of the Salt Industry in Canada, 1931 and 1932.

		1931	1932
Number of firms		7	7
Capital employed	$	4,196,927	3,805,008
Number of employees - On salaries		57	62
On wages		306	283
Total		363	345
Salaries and wages - Salaries	$	112,479	133,440
Wages	$	334,505	321,600
Total	$	446,984	455,040
Cost of fuel and electricity	$	184,001	176,836
Selling value of products	$	2,395,506	2,507,964

The Canadian salt industry in 1932 consumed 2,808 short tons of Canadian bituminous coal valued at $11,006 and 36,829 short tons of imported bituminous coal worth $153,285. Fuel oil consumption totalled 85,008 gallons worth $5,702 and electricity purchased amounted to 747,106 k.w.h.; this was evaluated at $6,813. The industry generated 1,764,567 k.w.h. for its own use.

World Production of Salt, 1930 and 1931.
(Supplied by Imperial Institute)
(Long tons)

Country	1930	1931
BRITISH EMPIRE		
United Kingdom (rock and brine)	2,067,564	1,897,564
Union of South Africa (years ending June 30)	87,928	(a)
Canada (sales)	241,493	228,224
India (including Aden)	1,711,348	1,839,000
Australia (b)	116,766	122,604
Other British countries	72,901	212,608
Total British Empire (b)	4,300,000	4,300,000
FOREIGN COUNTRIES		
Austria (rock and brine)	155,132	121,523
Czechoslovakia (rock and brine)	174,887	187,175
France (not including sea salt in 1931)	1,967,150	1,381,279
Germany (rock and brine)	2,910,163	2,537,146
Greece (sea salt) (e)	100,000	100,000
Italy (rock, brine and sea)	836,336	1,068,108
Jugoslavia (excluding sea salt)	53,773	51,850
Poland	525,833	552,000
Portugal (rock salt)	...	24
Russia	3,154,300	2,804,200
Spain (rock, brine and sea)	1,021,111	(a)
Switzerland	79,554	83,674
Egypt (exports)	152,406	101,248
Italian East Africa (estimated)	100,000	100,000
Mexico (estimated)	66,000	66,000
Panama (crude salt) estimated	50,000	50,000
United States (rock, brine and evaporated salt)	7,191,465	6,569,705
Argentina	142,309	(a)
Chili	48,997	(a)

World Production of Salt, 1930 and 1931. concluded
(Supplied by Imperial Institute)
(Long tons)

Country	1930	1931
FOREIGN COUNTRIES (concluded)		
Colombia (estimated)	29,000	29,000
Venezuela	20,395	(a)
China, including Kwantung Peninsula	2,562,500	2,235,000
Japan (c)	618,753	(a)
Netherlands East Indies (government and native)	339,412	(a)
Siam(d) (brine and sea)	178,144	193,298
Turkey (Anatolia) estimated	100,000	100,000
Other foreign countries	1,400,000	4,600,000
Total Foreign Countries	24,000,000	23,000,000
WORLD TOTAL	28,000,000	27,000,000

(a) Information not available.
(b) Estimated.
(c) Excluding production from salt beds which, although on Government beach lands, have no fixed areas. Figures refer to years ended March 31 following that stated.
(d) Years ended March 31st following that stated.
(e) Estimated on previous year's figures.

D I R E C T O R Y

Firms Operating in Canadian Salt Industry, 1932.

Name	Head Office Address	Plant Location
NOVA SCOTIA --		
Malagash Salt Co. Ltd.	204 Provost St., New Glasgow	Malagash
ONTARIO -		
Brunner, Mond Canada, Ltd.	501 Dominion Bank Bldg., Toronto	Amherstburg
Canadian Industries Limited	P. O. Box 1260, Montreal, P.Q.	Sandwich and Kincardine
The Dominion Salt Co. Ltd.	Sarnia	Sarnia
Goderich Salt Co. Ltd.	Goderich	Goderich
Western Canada Flour Mills Co. Ltd.	287 MacPherson Ave., Toronto	Goderich
MANITOBA --		
Neepawa Salt Co. Ltd.	Neepawa	Neepawa
SASKATCHEWAN --		
The Simpson Oil Co. Ltd.	Simpson	Simpson